

**SOLID ELECTROLYTE TYPE FUEL CELL POWER GENERATING APPARATUS**

Patent Number: JP11214021  
Publication date: 1999-08-06  
Inventor(s): HAMADA YUKITAKA;; ONDA KAZUO  
Applicant(s): ISHIKAWAJIMA HARIMA HEAVY IND CO LTD;; ONDA  
Requested Patent: ☐ JP11214021  
Application JP19980013677 19980127  
Priority Number(s):  
IPC Classification: H01M8/04; H01M8/00; H01M8/12  
EC Classification:  
Equivalents:

---

**Abstract**

---

**PROBLEM TO BE SOLVED:** To generate electric power while keeping a fuel cell in a suitable temperature by using pure hydrogen and pure oxygen as a fuel and an oxidizer, keeping their utilization factors high and without generating contaminants.

**SOLUTION:** This power generating apparatus is provided with solid electrolyte type fuel cell 20 having an anode and a cathode, an anode gas line 22 that supplies an anode gas containing hydrogen and oxygen to the fuel cell 20, an anode recycle line 24 that cools the anode gas which passed through the fuel cell 20 and removes moisture to the anode gas line 22, a cathode gas line 26 that supplies a cathode gas containing oxygen to the fuel cell 20, and a cathode recycling 28 that cools the cathode gas which passed through the fuel cell 20 and removes moisture to the cathode gas line 26. The temperature of the fuel cell 20 is controlled by cooling the gas in the recycle lines 26, 28.

---

Data supplied from the esp@cenet database - I2